## WHAT IS CLAIMED IS:

- 1. A stock preparation monitoring system, comprising:
- a stock preparation apparatus;

a sensor coupled with said stock preparation apparatus and configured for sensing a physical parameter associated with said stock preparation apparatus, said sensor including a wireless transmitter for transmitting an air-borne wireless output signal corresponding to said sensed physical parameter;

a remote unit including a receiver for receiving said wireless output signal, said receiver including a first data link for transmitting a remote output signal corresponding to said wireless output signal; and

a base unit including a second data link at least intermittently coupled with said first data link for receiving said remote output signal, said base unit including means for at least one of:

analyzing said remote output signal;

transmitting a state notification to said remote unit via said second data link and said first data link corresponding to a state of said sensed physical parameter;

transmitting a price quote to said remote unit via said second data link and said first data link; and

transmitting a shipment notification to said remote unit via said second data link and said first data link indicating a part has been shipped.

2. The stock preparation system of claim 1, wherein said stock preparation apparatus includes a wear part, and wherein said wireless output signal corresponds to a wear state of said wear part.

- 3. The stock preparation system of claim 2, wherein said stock preparation apparatus comprises a screen basket and said wear part comprises a screen within said screen basket.
- 4. The stock preparation system of claim 3, wherein said screen includes a plurality of holes and said wireless output signal generally corresponds to a profile of said holes.
- 5. The stock preparation system of claim 4, wherein said sensor comprises an ultrasound transceiver.
- 6. The stock preparation system of claim 5, wherein said wireless output signal generally corresponds to a size of said holes.
- 7. The stock preparation system of claim 1, said remote unit including means for at least one of:

analyzing said wireless output signal; and
transmitting a state notification to said base unit via said first data link and said
second data link corresponding to a state of said sensed physical parameter.

- 8. The stock preparation system of claim 1, wherein said base unit includes means for each of said analyzing step and said transmitting steps.
- 9. The stock preparation system of claim 1, wherein said first data link and said second data link each comprise a modem.
- 10. A method of monitoring a stock preparation system, comprising the steps of:

  providing a stock preparation apparatus;

  coupling a sensor with said stock preparation apparatus;

  sensing a physical parameter associated with said stock preparation apparatus;

  transmitting an air-borne wireless output signal using a wireless transmitter, said wireless output signal corresponding to said sensed physical parameter;

15

receiving said wireless output signal at a receiver of a remote unit;

transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; and

at least one of:

analyzing said remote output signal;

transmitting a state notification via said second data link and said first data link corresponding to a state of said sensed physical parameter;

transmitting a price quote to said remote unit via said second data link and said first data link; and

transmitting a shipment notification to said remote unit via said second data link and said first data link indicating a part has been shipped.

- 11. The method of claim 10, wherein said analyzing step is carried out in said base unit.
- 12. The method of claim 10, wherein said analyzing step is carried out in said remote unit.
- 13. The method of claim 10, wherein said step of transmitting said state notification comprises transmitting said state notification to said remote unit from said base unit.
- 14. The method of claim 10, wherein said steps of transmitting said price quote and transmitting said shipment notification are each carried out in said base unit.
- 15. The method of claim 10, wherein said first data link and said second data link each comprise a modem and said step of transmitting said remote output signal is carried out intermittently.
- 16. The method of claim 10, wherein said analyzing step is carried out after said step of transmitting said remote output signal.

5



17. A method of monitoring a physical parameter of a wear part in a system for one of making and processing a fiber suspension, comprising the steps of:

positioning a sensor in association with the wear part;

sensing a physical parameter associated with the wear part;

transmitting an air-borne wireless output signal using a wireless transmitter, said wireless output signal corresponding to said sensed physical parameter;

receiving said wireless output signal at a receiver of a remote unit;

transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; and

at least one of:

analyzing said remote output signal;

transmitting a state notification corresponding to a state of said sensed physical parameter;

transmitting a price quote; and

transmitting a shipment notification.

- 18. The method of claim 17, wherein said system comprises one of a stock preparation system and a paper-making machine.
  - 19. A stock preparation monitoring system, comprising:

a stock preparation apparatus;

a sensor coupled with said stock preparation apparatus and configured for sensing a physical parameter associated with said stock preparation apparatus, said sensor including a transmitter for transmitting an output signal corresponding to said sensed physical parameter;

VOI0148.US 13

15

a remote unit including a receiver for receiving said output signal, said receiver including a first data link for transmitting a remote output signal corresponding to said output signal; and a base unit including a second data link at least intermittently coupled with said first data link for receiving said remote output signal, said base unit including means for at least one of:

analyzing said remote output signal;

transmitting a state notification to said remote unit via said second data link and said first data link corresponding to a state of said sensed physical parameter;

transmitting a price quote to said remote unit via said second data link and said first data link; and

transmitting a shipment notification to said remote unit via said second data link and said first data link indicating a part has been shipped.